

More Wayes
For the same Purpose, Intimated by M.
Hook.

I Have by me (*saieth Mr. H.*) two or three several wayes of *Measuring the Diameters* of the Planets, whether *Horizontal*, *Perpendicular*, or *Inclined*, to the exactness of a *Second*, by the help of a *Telescope*: As also, of taking the *Position and Distance* of the *Small Fixt Stars* one from another, or from any of the less bright *Planets*, if the *Distance* be not above two or three *Degrees*.

The Particulars hereof, the Author refers to the next Opportunity.

Observations
Of the Star, called Nebulosa, in the Girdle of
Andromeda; and of the Wondrous Star in
the Neck of the Whale: made and com-
municated by Monsieur Bullialdus.

A *Nno 1667.* in *January*, when the *Cloudy and Misty* weather, which had continued for a good while, did permit us to observe, the *Star Nebulosa*, in the *Girdle of Andromeda* (which may well enough be seen by the bare Eye) appeared much obscurer than the Year before. In the Months of *February* and *March* I did not see it.

Anno 1667, January 20. at Night, *h. 6. 30.* the Sky being pretty serene, the *Star in the Neck of the Whale*, did approach to the bigness of a *Star of the Sixth Magnitude*, and grew bigger afterwards.

February 12, h. 6. 30'. I saw the same again, equalling now a *Star of the Fourth Magnitude* at least.

February 24, h. 7. This *Star* was equal to those of the *Third Magnitude*, shining very bright.

February²⁶, The same appeared yet to increase; as also February 27. But after this time I could not see it, by reason of the ill weather.

The same Astronomer did subjoin the following Extract of a Letter he received from Monsieur Hevelius, March 15. 1667. concerning such another Star; viz.

I have watched the *New Star* in the *Neck of the Whale*, as often as the weather would give me leave, which it hath done but seldom this Winter. In *January*, the 3, 4, 5, 7, and 13 days, it did not yet appear. From this time, the Sky was continually overcast, till *January 23*. on which day, I found a little Star of the *Sixth*, or *Seventh Magnitude*, about the same place where the said *New Star* uses to appear. But it then seemed to me not the genuine *New Star*, but another, to wit, preceding the *New*; whose *Longitude* hath been defined by me in *Mercurius in Sole visus in Aries*. gr. 25. 43'. 3". and the *Latitude* gr. 14. 41'. 32". South, Anno 1660. Then from *January 23*, to *February 2*, it was Cloudy weather again; but this *second of February*, it appear'd very bright, and that when the Moon shone, of the bigness of that in the *Mouth of the Whale*, or *Nodo Lini*: from which time I alwayes observed it to grow bigger. *March 13*. I did still find it extreemly bright, but could not by my naked Eye, because of the vivid *Crepuscle*, and the low site of the Star, accurately determine its Magnitude.

I have received (*saith he further*) your two *Monita ad Astronomos*; and the *Discourse* hath much pleased me, you having not much deviated from the Truth, in respect of the Appearance. Heretofore I had of this, and other *New Stars*, another *Hypothesis*; but I cannot thereby so accurately divine the Appearances, as you will read more largely in its due place.

See Num^b. 22. of these Transactions, p. 381, 382. where an account is given of these two *Monita* of M. Bullialdus.